

ATOMIC LAYER EPITAXIAL DEVICE AND ATOMIC LAYER EPITAXY

ATOMIC LAYER EPITAXIAL DEVICE AND ATOMIC LAYER EPITAXY

Patent Number: JP5270997

Publication date: 1993-10-19

Inventor(s): WATABE JUNICHI; others: 02

Applicant(s): FUJITSU LTD

Requested Patent: JP5270997

Application Number: JP19920064149 19920319

Priority Number(s):

IPC Classification: C30B29/68; C30B23/08; C30B25/02

EC Classification:

EC Classification:

Equivalents: JP3103186B2

Abstract

PURPOSE: To realize an atomic layer epitaxial device and atomic layer epitaxy suitable for mass production and causing no lowering of film quality, in the atomic layer epitaxy which is one of thin film forming technique and the atomic layer epitaxial device.

CONSTITUTION: In an atomic layer epitaxial device for obtaining a prescribed film thickness by alternately exposing a substrate in atmosphere of plural different kinds of raw material gases and alternately forming a film on the surface of the substrate, the device is characterized in that a ring-like treating chamber 10 is formed between the inner wall 8 and outer walls 9 by concentrically arranging cylindrical outer wall 8 and inner wall 9, plural sheets of substrates 3 are put at prescribed intervals in the circumferential direction and a substrate holder 11 retained in the tangential direction is provided and the substrate holder 11 is attached in a rotating mechanism 12 rotating the center of the ring-like treating chamber 10 as a rotating center.